

**REMARKS**

Entry of the above amendments prior to examination is respectfully requested.

Attached hereto is a marked-up version of the changes made to the specification by the current amendment. The attached page(s) is/are captioned "Version with Markings to Show Changes Made."

I. Amendments

A. Amendments to the Specification

The specification is amended in accord with the amended figure numbering.

Accordingly, no new matter is added by way of these amendments.

B. Amendments to the Drawings

Figures 9A and 10A are amended in accord with USPTO formal drawing requirements.

No new matter is added by way of these amendments.

If in the opinion of the Examiner a telephone conference would expedite the prosecution of the subject application, the Examiner is encouraged to call Rick Gregory at (650) 838-4408.

Respectfully submitted,

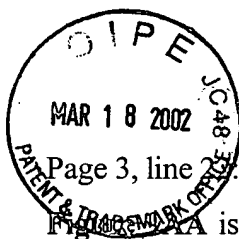


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**Version with Markings to Show Changes Made**

**Figure 9AA** is a catheter system including a nosecone with an internal ramp to guide an internal cannula element or laser for re-entry, under an embodiment.

**Figure 9AB** is a top view of the catheter system of Figure 9AA.

**Figure 9AC** is a front view of the catheter system of Figure 9AA.

**Figure 9B** is a catheter system in an initial position prior to cannula deployment, under the embodiment of Figures 9AA-9AC.

**Figure 9C** is a catheter system with a cannula deployed and a re-entry element advanced across sub-intimal tissue, under the embodiment of Figures 9AA-9AC.

**Figure 9D** is a catheter system with a cannula advanced into a vessel true lumen, under the embodiment of Figures 9AA-9AC.

**Figure 9E** is a catheter system following retraction of a re-entry element with the cannula maintained in the vessel true lumen, under the embodiment of Figures 9AA-9AC.

**Figure 9F** is a catheter system with a guide wire advanced into a vessel true lumen, under the embodiment of Figures 9AA-9AC.

**Figure 10AA** is a catheter system including a nosecone with an internal ramp to guide a specialized guide wire for re-entry, under an alternative embodiment of Figures 9AA-9AC and 9B.

**Figure 10AB** is a top view of the catheter system of Figure 10AA.

**Figure 10AC** is a front view of the catheter system of Figure 10AA.

**Figure 10B** is a catheter system including a nosecone, under the embodiment of Figures 10AA-10AC, showing a specialized guide wire deploying from the internal ramp.

**Figure 10C** is a catheter system including a nosecone, under the embodiment of Figures 10AA-10AC, showing a distal taper of the specialized guide wire deploying from the internal ramp.

**Figure 10D** is a catheter system including a nosecone, under the embodiment of Figures 10AA-10AC, showing the distal taper of the specialized guide wire repositioning from the internal ramp through the nosecone slot.

**Figure 10E** is a catheter system including a nosecone, under the embodiment of Figures 10AA-10AC, showing catheter removal from a treatment site following deployment of the specialized guide wire using the nosecone.

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**Figures 9AA-9AC** [is] are a catheter system including a nosecone 902 with an internal ramp 904 to guide an internal cannula element and a re-entry laser system, under an embodiment. The nosecone 902 also includes a guide wire distal exit port 906, and a cutout 908 to guide fluoroscopic alignment. A side view 912, top view 914 and front view 916 of the nosecone 902 are shown.

Page 14, line 19:

**Figures 10AA-10AC** [is] are a catheter system including a nosecone 1002 with an internal ramp to guide a specialized guide wire for re-entry, under an alternative embodiment of Figures 9A and 9B. The nosecone 1002 of this embodiment has a modified guide wire exit port 1006 to accommodate the specialized guide wire or a specialized cannula. **Figures 10B-10E** show deployment of the specialized guide wire.

Page 15, line 18:

**Figure 12A** is a catheter system 1200 including a nosecone 1202 with an internal ramp 1204 and an internal slidably disposed tube 1206, under an alternative embodiment of **Figures 9AA-9AC, 9B, and 10AA-10E**. The position of the internal tube 1206 is controllable to aid in steering a working element 1208 deployed via the catheter system 1200. When the internal tube 1206 is in this retracted position, the working element 1208 is deployed at a shallower deployment angle relative to a longitudinal axis of the catheter system 1200. **Figure 12B** shows the catheter system 1200 when the internal tube 1206 is in an extended position. Extension of the internal tube 1206 results in deployment of the working element 1208 at deployment angles that are progressively more acute. A variety of working elements or devices 1208 are deployable using the internal ramp 1204, including typical guide wires, specialized guide wires (see **Figure 16** and the associated description herein), fiber optic systems (see **Figures 17A and 17B** and the associated description herein), RF system components (see **Figure 18** and the associated description herein), and IVUS (see **Figure 19** and the associated description herein).